

**d.) Remarks.**

The specification has been amended to correct three typographical errors. Claims 1, 16 and 26 have been amended to recite a “desired pattern.” Support for these amendments can be found throughout the specification, and specifically, for example, on page 14, line 28. Claims 1 and 26 have also been amended to replace “A” with “An” preceding the word “electrically.” Claim 13 has been amended to correct a grammatical error. Claims 18-15, 33 and 34 have been withdrawn, with traverse, following the June 11, 2007, Restriction Requirement being made final by the Examiner. No new matter has been added or new issues raised with these amendments and new claims. Thus, claims 1-17 and 26-32 are currently pending.

**Remarks Regarding Judicially-Created Doctrine of Double Patenting**

Claims 1-17 and 26-32 stand provisionally rejected under the judicially-created doctrine of obviousness-type double patenting over claims 1-12 of co-pending U.S. Application No. 10/105,623. Although Applicant respectfully traverses this rejection, both applications are 100% owned by Applicant as evidenced by the assignment documents. The assignment for instant U.S. Patent Application No. 10/729,369 can be found at Reel/Frame 015744/0667 recorded on August 31, 2004, and the assignment for U.S. Patent Application No. 10/105,623 can be found at Reel/Frame 013354/0936 recorded on October 3, 2002. Accordingly, enclosed is a suitable Terminal Disclaimer to overcome this rejection. Thus, this provisional rejection is moot and Applicant respectfully requests that it be withdrawn.

**Remarks Regarding 35 U.S.C. § 102**

A. Claims 1-5, 8-16 and 26-27 stand rejected, under 35 U.S.C. § 102(b), as allegedly anticipated by Shibuta (US Patent No. 5,908,585). Applicant respectfully traverses the rejection and all comments made in the Office Action.

Anticipation can only be established by a single prior art reference which discloses each and every element of the claimed invention (*See RCA Corp. v. Applied Digital Data Systems, Inc.*, 730 F.2d 1440, 1444 (Fed. Cir. 1984)). “The identical invention must be shown in as complete detail as is contained in the patent claim” (*Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236 (Fed. Cir. 1989)). It is not enough, however, that the reference disclose all the claimed elements in isolation.

Rather, as stated by the Federal Circuit, the cited art reference must disclose each element of the claimed invention “arranged as in the claim” (*Connell v. Sears, Roebuck & Co.*, 722 F.2d 1542, 1548 (Fed. Cir. 1983)).

Applicant respectfully asserts that each and every aspect of rejected independent claims 1, 16 and 26 is not disclosed or suggested in Shibuta, and, thus, Shibuta cannot be considered to anticipate these claims. At the very least, the claimed elements of a “patterned film” (claim 1) a “pattern of carbon nanotubes” (claim 16) or an “electrically conductive patterned layer” do not appear anywhere within Shibuta.

The Examiner alleges that a screen printed, as disclosed in Shibuta at column 6, lines 50-56, is “inherently patterned.” Applicant respectfully disagrees with this assertion. Patterning implies non-randomness; accordingly, patterning is not inherent to an electrically conductive film. It is Applicant’s position that the claimed patterning is the result of significant effort and experimentation. See specification at page 15. Nevertheless, in an effort to expedite prosecution of this case, Applicant has amended the independent claims to recite “desired patterns” and provides the following remarks.

The importance of patterning to Applicant’s claimed invention is explained at length throughout the specification, and it is clear from the specification that the patterning is a “desired” patterning achieved via an assortment of methods comprised in the different embodiments of this invention and according to specific purposes. See page 14 at lines 25-31. For example, “open space between the conductive nanotube network” (specification at bottom of page 10 to top of page 11) in Applicant’s claimed patterned film (claims 1 and 16) or layer (claim 26) is essential for achieving the conductive and transparent property interplay desirable for specific applications. Applicant’s specification also describes a plethora of patterning methods required for creating the claimed patterns, evincing the lack of inherency in film or layer patterns of conductive materials. For example, laminating screens or meshes, etching, lithographic techniques, and surface preparation techniques are just some of the tools and methods disclosed by Applicant for achieving the claimed desired pattern. Specification at 15. Patterning at dimensions for a given spectral range (specification at page 15, lines 17-19) is also

disclosed by Applicant and demonstrative of the fact that in stark contrast to the Examiner's erroneous inherency allegations, considerable effort and experimentation are required for achieving the claimed invention.

Because Shibuta does not disclose or suggest Applicant's claimed structures, particularly as clarified through the current amendments emphasizing "desired" patterning in claims 1, 16 and 26, Shibuta does not anticipate the claimed invention. For at least these reasons, Applicant respectfully requests that this rejection be withdrawn.

**B.** Claims 1-17 and 26-32 stand rejected under 35 U.S.C. § 102(e) as allegedly anticipated by Glatkowski (US 2003/0122111). Applicant respectfully traverses this rejection.

Applicant has reviewed Glatkowski and cannot find the claims as recited herein by Applicant. Specifically, at least the term "desired pattern" is absent. Therefore, Glatkowski does not anticipate the claimed invention. If the Examiner can point to any such disclosure in Glatkowski, Applicant is willing to provide a Declaration under 37 CFR 1.132 showing that any invention disclosed but not claimed in Glatkowski, or in any application claiming the benefit of priority of Glatkowski, was derived from the inventor of the present application and is thus not the invention "by another." Applicant is providing an unsigned Declaration to be perfected in the event that the Examiner can point to any disclosure of an expendable matrix in Glatkowski. For at least these reasons, Applicant respectfully requests that this rejection under 35 U.S.C. § 102(e) be withdrawn.

**Remarks Regarding 35 U.S.C. § 103(a)**

**A.** Claim 6-7, 28 and 30-32 stand rejected under 35 U.S.C. § 103(a) as allegedly obvious over Shibuta. Applicant respectfully traverses this rejection.

Applicant incorporates all arguments made above with regard to Shibuta. For at least these reasons, Shibuta is not appropriate prior art because it neither discloses nor suggests the claimed invention.

The Examiner alleges that "[i]t would have been obvious to one having ordinary skill in the art at the time the invention was made to optimize the thickness and fill area to achieve the surface

resistivity and transparency desired for particular applications, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art.” Office Action at page 5, Item 16. Applicant respectfully disagrees with these assertions and is admittedly confused by the Examiner’s statements.

The Examiner states in Item 13 that Shibuta “is silent as to the thickness of the layer, the fill area, or the claimed surface resistivity of claim 6 and 7.” Applicant, therefore, fails to see how “optimizing” features on which Shibuta is silent would be “obvious” over Shibuta. In other words, how would it ever be possible to “optimize” features that did not exist in Shibuta? Because Shibuta neither discloses nor suggests the claimed desired pattern, thickness of the layer, fill area, or claimed surface resistivity, this rejection cannot stand. For at least these reasons, Applicant respectfully requests that this rejection be withdrawn.

B. Claim 29 stands rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Shibuta in view of Narayan (US 2003/0213939).

Applicant incorporates all arguments made throughout this response with regard to Shibuta. For at least these reasons, Shibuta is not appropriate prior art because it neither discloses nor suggests the elements of claim 29.

Moreover, particularly in view of the claim amendments, neither Shibuta nor Narayan discloses or suggests a “desired pattern” as is recited in amended independent claim 26, on which presently rejected claim 29 depends. Applicant, therefore, respectfully requests that this rejection be withdrawn.

C. Claim 17 stands rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Shibuta in view of Amey (US 6,565,403).

Applicant incorporates all arguments made throughout this response with regard to Shibuta. For at least these reasons, Shibuta is not appropriate prior art because it neither discloses nor suggests the claimed invention.

Furthermore, neither Amey nor Shibuta, either alone or in combination, disclose or suggest a transparent, electrically conductive film comprising a desired pattern of carbon nanotubes within said film, wherein said pattern provides an electrical resistivity of less than  $10^3$  ohms/square and a

visible transmission of at least 75%, as recited in claim 16. Accordingly, Applicant respectfully requests that this rejection be withdrawn.

For at least the reasons stated above, neither Shibuta, Narayan nor Amey discloses or suggests the claimed invention alone or in combination with the others. Thus, all of the rejections of claims 1-17 and 26-32, under 35 U.S.C. § 103 (a), are moot or overcome and Applicant respectfully requests that they be withdrawn.

### **Conclusion**

The application is in condition for allowance and the prompt issuance of a Notice of Allowance is respectfully requested. If there are any fees due with the filing of this Amendment, including any fees for an extension of time, Applicant respectfully requests that extension and also requests that any and all fees due be charged to Deposit Account No. 14-1437, referencing Attorney Docket No. 8125.012.US.

Respectfully submitted,  
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